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内 Kanagawa (JP). 荒川 伸 (ARAKAWA,Satoshi) [JP/JP]; 〒254-0013 神奈川県 平塚市 田村5181番地 日本バイオニクス株式会社 平塚研究所内 Kanagawa (JP). 越智幸史 (OCHI,Koshi) [JP/JP]; 〒254-0013 神奈川県 平塚市 田村5181番地 日本バイオニクス株式会社 平塚研究所内 Kanagawa (JP).

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(74) 代理人: 大谷 保 (OHTANI,Tamotsu); 〒105-0001 東京都 港区 虎ノ門3丁目25番2号 ブリヂストン虎ノ門ビル6階 Tokyo (JP).

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(71) 出願人 (米国を除く全ての指定国について): 日本バイオニクス株式会社 (JAPAN PIONICS CO., LTD.) [JP/JP]; 〒105-0003 東京都 港区 西新橋1丁目1番3号 Tokyo (JP).

(72) 発明者: および
(75) 発明者/出願人 (米国についてのみ): 大塚 健二 (OHTSUKA,Kenji) [JP/JP]; 〒254-0013 神奈川県 平塚市 田村5181番地 日本バイオニクス株式会社 平塚研究所

(81) 指定国 (国内): CN, KR, US.

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添付公開書類:
— 国際調査報告書

2文字コード及び他の略語については、定期発行される各PCTガゼットの巻頭に掲載されている「コードと略語のガイドブック」を参照。

(54) Title: METHOD FOR CLARIFYING EXHAUST GAS

(54) 発明の名称: 排ガスの浄化方法

(57) Abstract: A method for clarifying an exhaust gas, which comprises contacting an exhaust gas containing nitrogen oxides and/or an organic solvent with a clarifying agent containing a metal as a reducing component thereof and a metal oxide as an oxidizing component thereof or a clarifying agent containing a lower valent metal oxide as a reducing component thereof and a higher valent metal oxide as an oxidizing component thereof at a high temperature, checking the change of the constitution ratio of the reducing component and the oxidizing component associated with the reduction of the nitrogen oxides by the reducing component and/or the oxidative decomposition of the organic solvent by the oxidizing component, and supplying a gas for correction when the constitution ratio deviates from a predetermined control range, so as to maintain the constitution ratio within the control range during the clarification of the exhaust gas. The method allows the clarification of an exhaust gas containing nitrogen oxides and/or an organic solvent in a high concentration and in a wide range of variation, such as an exhaust gas from a semiconductor manufacturing process, at a relatively low temperature with a high decomposition rate with ease.

WO 03/103806 A1

(57) 要約: 本発明の排ガス浄化方法においては、窒素酸化物及び/または有機溶媒を含む排ガスを、還元性浄化剤成分として金属及び酸化性浄化剤成分として金属酸化物を含む浄化剤、または、還元性浄化剤成分として低次の金属酸化物及び酸化性浄化剤成分として高次の金属酸化物を含む浄化剤と加熱下で接触させる。還元性浄化剤成分による窒素酸化物の還元及び/または酸化性浄化剤成分による有機溶媒の酸化分解の進行に伴う還元性浄化剤成分と酸化性浄化剤成分の構成比の変化を検知し、前記構成比が予め設定した管理範囲を逸脱した際に補正ガスを供給し、前記構成比を管理範囲に修復しながら排ガスを浄化する。本発明の排ガス浄化方法により、半導体製造装置から排出されるような高濃度かつ濃度変動が大きい窒素酸化物及び/または有機溶媒を含む排ガスを、大型の浄化装置あるいは複雑な構成を有する浄化装置を使用することなく、比較的低い温度及び高い分解率で、容易に浄化できる。

RECENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

OHTANI, Tamotsu
 Bridgestone Toranomon BLDG. 6F.
 25-2, Toranomon 3-chome
 Minato-ku, Tokyo 105-0001
 Japan

Date of mailing (day/month/year) 26 August 2003 (26.08.03)			
Applicant's or agent's file reference FMN-1103	IMPORTANT NOTIFICATION		
International application No. PCT/JP03/06127	International filing date (day/month/year) 16 May 2003 (16.05.03)		
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 07 June 2002 (07.06.02)		
Applicant JAPAN PIONICS CO., LTD. et al			

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. An asterisk(*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
07 June 2002 (07.06.02)	2002-166672	JP	11 July 2003 (11.07.03)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 338.90.90	Authorized officer Farid ABOU Telephone No. (41-22) 338 8169
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NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

OHTANI, Tamotsu
 Bridgestone Toranomon BLDG. 6F.
 25-2, Toranomon 3-chome
 Minato-ku, Tokyo 105-0001
 JAPON

Date of mailing (day/month/year)
 18 December 2003 (18.12.03)

Applicant's or agent's file reference
 FMN-1103

IMPORTANT NOTICE

International application No.
 PCT/JP03/06127

International filing date (day/month/year)
 16 May 2003 (16.05.03)

Priority date (day/month/year)
 07 June 2002 (07.06.02)

Applicant

JAPAN PIONICS CO., LTD. et al

1. Notice is hereby given that the International Bureau has **communicated**, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

CN, EP, KR, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

None

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this notice is a copy of the international application as published by the International Bureau on 18 December 2003 (18.12.03) under No. WO 03/103806

4. TIME LIMITS for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

For filing a demand for international preliminary examination, see the *PCT Applicant's Guide*, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland

Authorized officer

Judith Zahra

Facsimile No.(41-22) 740.14.35

Telephone No.(41-22) 338.91.11